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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/054,891	01/25/2002	Naotaka Wachi	Q68255	5436

23373 7590 09/10/2003

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EXAMINER

SCHILLING, RICHARD L

ART UNIT PAPER NUMBER

1752

DATE MAILED: 09/10/2003

12

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/054891

Applicant(s)

Wachi et al

Examiner

R L Schilling

Group Art Unit

1752

—The MAILING DATE of this communication appears on the cover sheet beneath the correspondence address—

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, such period shall, by default, expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).

## Status

- ☒ Responsive to communication(s) filed on 8-25-03
- ☐ This action is **FINAL**.
- ☐ Since this application is in condition for allowance except for formal matters, **prosecution as to the merits is closed** in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

## Disposition of Claims

- ☒ Claim(s) 1-32, 34, 36, 38-46 is/are pending in the application.
- Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- ☒ Claim(s) 1-6, 17-32, 34, 36, 38-46 is/are rejected.
- ☒ Claim(s) 7-16 is/are objected to.
- ☐ Claim(s) \_\_\_\_\_ are subject to restriction or election requirement.

## Application Papers

- ☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.
- ☐ The proposed drawing correction, filed on \_\_\_\_\_ is ☐ approved ☐ disapproved.
- ☐ The drawing(s) filed on \_\_\_\_\_ is/are objected to by the Examiner.
- ☐ The specification is objected to by the Examiner.
- ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. § 119 (a)-(d)

- ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
  - ☐ All ☐ Some\* ☐ None of the CERTIFIED copies of the priority documents have been received.
  - ☐ received in Application No. (Series Code/Serial Number) \_\_\_\_\_
  - ☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\*Certified copies not received: \_\_\_\_\_

## Attachment(s)

- ☐ Information Disclosure Statement(s), PTO-1449, Paper No(s). \_\_\_\_\_
- ☒ Notice of Reference(s) Cited, PTO-892
- ☐ Notice of Draftsperson's Patent Drawing Review, PTO-948
- ☐ Interview Summary, PTO-413
- ☐ Notice of Informal Patent Application, PTO-152
- ☐ Other \_\_\_\_\_

Office Action Summary

Art Unit 1752

1. Claims 1-6, 17-32, 34, 36 and 38-46 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Wachi et al. '504 or the combination of Japanese Publications 2001/310941 and 2001/328287 all further in view of Kawakami et al. for the same reasons as set forth in paragraph 5 of the second Office action filed April 23, 2003. Applicants' argument that Wachi et al. do not disclose the use of matting agents in their light to heat conversion layers is unconvincing since Wachi et al. (see particularly column 9, lines 49-65; Example 20) does disclose the use of matting agents in light to heat conversion layers. The Declaration under 37 CFR 1.132 showing improved results for using matting agents in light to heat conversion layers is unconvincing since Wachi et al. disclose the use of matting agents in light to heat conversion layers. Wachi et al. does not disclose the purpose for employing the matting agents as used in working Example 2. However, it is known in the art that uneven surfaces caused by matting agents allows for uniform vacuum for contact between transfer and image receiving sheets of large sizes as disclosed in Kawakami et al. (column 15, lines 4-30).

2. Claims 1-6, 17-32, 34, 36 and 38-46 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Wachi et al. '504 or the combination of Japanese Publications 2001/310941 and 2001/328287 all further in view of Kawakami et al. as set forth in paragraph 1 above further in view of Miyake et al. Miyake et

Art Unit 1752

al. (see particularly column 2, lines 45-67; column 7, lines 33-40; column 9, lines 1-40; Examples 1-16) discloses thermal transfer elements of the same type as set forth in Wachi et al. and the Japanese publications comprising light to heat conversion layers and thermal transfer layers wherein matting agents are added to the light to heat conversion layers in order to increase vacuum adhesion uniformity between the heat transfer sheets and image receiving sheets and enhance adhesion between the heat transfer sheets and image receiving sheets during transfer. In view of the teachings in Miyake et al., it would at least be obvious to one skilled in the art to use matting agents in the light to heat transfer layers of Wachi et al. in order to provide high quality images by improving the vacuum adhesion between the heat transfer sheets and image receiving sheets particularly since Wachi et al. does disclose the use of matting agents in their light to heat conversion layers. The Declaration under 37 CFR 1.132 showing improved results for the use of matting agents is unconvincing since Wachi et al. discloses the use of matting agents and Miyake et al. discloses that matting agents in light to heat conversion layers improve transfer properties by improving vacuum uniformity between the transfer sheets and image receiving sheets during transfer. Therefore, one skilled in the art would expect better transfer when using matting agents; and it would be obvious to one skilled in the art to use matting

Art Unit 1752

agents in the elements of Wachi et al. in order to improve vacuum uniformity and contact between the transfer and image receiving sheets even if other secondary advantages are also obtained in using matting agents. The Declaration is also unconvincing since the image receiving sizes of the comparison image receiving sheets are not set forth.

3. Claims 1-6, 17-32, 34, 36 and 38-46 are rejected under 35 U.S.C. § 102(e) as being anticipated by Nakamura et al. '418. The applied reference has a common inventor and assignee with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art under 35 U.S.C. § 102(e). This rejection under 35 U.S.C. § 102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not the invention "by another," or by an appropriate showing under 37 CFR 1.131. Nakamura et al. '418 (see particularly paragraphs 11, 31-35, 129-132, 140, 165-166, 259, 260, 264; Example 2) discloses heat transfer sheets and processes as set forth in the instant claims with light to heat converting layers containing matting agents having optical density to layer thicknesses as required by the instant claims, transfer layers having optical density to thickness ratios as required by the instant claims and recording areas of a size required by the instant claims. The processes in

Art Unit 1752

Nakamura et al. also produce images with resolutions as required by the instant claims.

4. Wachi et al. '664 is cited of interest in the art as being the patent application publication corresponding to the above applied U.S. patent to Wachi et al. It is noted that the publication date of the patent application publication is one day prior to the filing date of the instant application. Takahashi et al. '562 is cited of interest in the art as corresponding to Japanese Publication 4-296594 cited by applicants.

5. Claims 7-16 are objected to as depending on a rejected claim but would be allowable if written in proper independent form.

6. Any inquiry concerning this communication should be directed to Mr. Schilling at telephone number (703) 308-4403.

RLSchilling:cdc

September 4, 2003

RICHARD L. SCHILLING  
PRIMARY EXAMINER  
GROUP 1400-1752

